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Note:

The current operating instructions, the EC Declaration of Conformity and the ex-certificate can be downloaded from the relevant product page at **www.ecom-ex.com**, or alternatively they can be requested directly from the manufacturer.

1. Application

The Ex-PMR 2000 is a professional radio (UHF / VHF range) for industrial application in areas with an increased risk of explosion in zones 1 and 2, in accordance with directive 1999/92/EC (ATEX 137).

2. Safety precautions

These operating instructions contain information and safety regulations which are to be observed without fail for safe operation in the described conditions. Non-observance of this information and these instructions can have serious consequences or it may violate regulations.

Please read these operating instructions carefully before starting to use the unit!

In case of any doubt (in the form of translation or printing errors) the German language operating instructions shall apply.

3. Faults and damage

If there is any reason to suspect that the safety of the unit has been impaired, it must be withdrawn from use and removed immediately from the Ex-area. Measures must be taken to prevent it from being restarted accidentally. We recommend that the unit is returned to the manufacturer for inspection.

The safety of the device may be compromised, if, for example:

- there is visible damage to the housing.
- the unit has been subjected to excessive loads.
- the unit has been improperly stored.
- the unit has been damaged in transit.
- unit markings or inscriptions are illegible.
- malfunctions occur.
- permitted limit values have been exceeded.

4. Safety regulations

Use of this unit assumes that the operator observes conventional safety regulations and has read the certificate in order to eliminate faulty operation of the unit.

The following safety regulations must also be complied with:

- The unit itself and the battery must not be opened.
- The aerial must not be unscrewed or exchanged within the Ex-area.
- The battery may only be exchanged outside the Ex-area.
- Additional batteries must not be carried in the Ex-area.

- The cover of the headset socket must be kept closed when the headset is not connected.
- Only Ex-AM PMR 2000 batteries specified by the manufacturer may be used.
- The use of other batteries is strictly prohibited and will result in the nullification of Ex-protection.
- The battery should only be charged outside the Ex-area using the appropriate charger LS PMR 2000 and the corresponding power supply unit PS PMR 2000, the multi-charger MC PMR 2000 or the car charger WTC638.
- The screws must be re-tightened after changing the battery.
- Only the appropriate microphone/loudspeaker combination Ex-HS 02 or Ex-EPM 02 may be connected to the headset connection within the Ex-area.
- Only the appropriate earphones EP1 may be connected to the microphone/loudspeaker combination Ex-HS 02 within the Ex-area.
- The unit must only be cleaned using a damp cloth.
- Only approved accessories from ecom instruments GmbH may be used.
- It must be ensured that the unit is not taken into zone 0.

5. Approved accessories within the Ex-area

Battery:

- Battery pack Ex-AM PMR 2000

Headset connection:

- Microphone/loudspeaker combination Ex-HS 02
or
- Ex-EPM 02

ExTRA 300 B Headsets

Ex-HS 02 earphone connection:

- Earphones EP 1

6. Ex-Data

EC-Type Examination Certificate No.: ZELM 06 ATEX 0318

Ex-Designation:  II 2 G Ex ia IIC T4

Approved for:

Zone 1 and 2, device group II, explosion group IIC explosive gases, vapours or mist, temperature class T4

7. Specifications

Frequency range:	VHF 136-174 MHz, UHF 400-470 MHz
Channels:	16
Channel spacing:	12.5/20/25 kHz
Operating voltage:	7.4 V
Aerial impedance:	50 Ω
Protection rating:	IP64
Dimensions (LxWxD):	119 x 59 x 45 mm
Weight:	approx. 400g
Battery / power supply:	Ex-AM PMR 2000, 1700/1960 mAh Li-Ion
Operating time (standby/RX/TX)	approx. 12 hours (90/5/5)
Ambient temperature Ta	-20°C ... +50°C
Storage temperature:	-20°C ... +45°C
CE-Designation:	CE 0102

8. Functional description/operating instructions

Please read these operating instructions carefully so that you are familiar with, and are able to use, all of the functions of your Ex-PMR 2000. For your own safety and information please read through the instructions on the following pages!

8.1 General information

8.1.1 Radio frequency radiation

Your Ex-PMR 2000 walkie-talkie has been designed and tested so that it fulfils the strict national and international standards and guidelines (see below) regarding compliance with the limit values for electromagnetic radiation in the high frequency (HF) spectrum.

This radio unit fulfils the IEEE (FCC) and ICNIRP standards with limit values for an operational/controlled HF-load with operating cycles of up to 50% speaking - 50% listening. The unit should be used exclusively in a professional environment and is not intended for use by the general public.

With regards to the measurement of HF-radiation in accordance with FCC / ICNIRP guidelines, your walkie-talkie only radiates measurable HF rays when transmitting (i.e. when speaking), not when receiving (listening) or while in the standby mode.

Furthermore your Ex-PMR 2000 fulfils the following guidelines for HF-radiation:

- American Federal Communications Commission (FCC), Code of Federal Regulations; 47 CFR, part 2, subsection J

- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (amalgamation of electrical and electronic engineers, IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (amalgamation of electrical and electronic engineers, IEEE) C95. 1-1999
- The international commission for radiation protection (non-ionising radiation; International Commission on Non-Ionizing Radiation Protection; ICNIRP) 1998

Please note: The specified operating time of the provided Ex-AM PMR 2000 battery has been measured for a working cycle of 5-5-90 (5% speaking - 5% listening - 90% standby), although the radio unit fulfils the FCC / ICNIRP limit values for employment with up to 50% transmission.

8.1.2 Information for operation

In order to ensure optimal operation and to guarantee that the limit values for HF radiation are maintained in an operational/controlled environment according to the aforementioned standards and guidelines, users of this walkie-talkie should not spend any longer than 50% of the time transmitting messages and should always proceed as specified below:

- Transmitting and receiving
The speak button (PTT) is actuated to transmit (speak) and the PTT button is released to receive.
- Walkie-talkie operation
Hold the radio unit upright and make sure that the microphone is positioned approx. 2.5cm - 5cm away from your mouth.
- Radio unit carried by the body
Only carry the radio in accessories that are specifically designated for it and approved by ecom instruments GmbH. These include belt clips, leather cases and/or carrying belts. The use of non-approved accessories can result in a violation of the standards and guidelines specified.
- Aerials & batteries
Only an aerial that is supplied and approved by ecom instruments GmbH or a replacement aerial approved by ecom instruments GmbH may be used. Unapproved aerials or modifications made to accessories can result in damaging the radio unit or in a violation of the applicable standards and guidelines. Only those batteries supplied and approved by ecom instruments GmbH or replacement batteries approved by ecom instruments GmbH may be used. The use of non-approved batteries can result in a violation of the applicable standards and guidelines.

8.1.3 Compliance with FCC guidelines

This unit has been tested and fulfils the requirements for class B digital devices in accordance with part 15 of the FCC regulations. These regulations ensure the appropriate protection against harmful disturbances in residential buildings. This unit produces and uses energy in the radio frequency spectrum and it can also radiate such energy. If it is not installed and used in accordance with these instructions, it may cause disturbances to radio communications. No guarantee can be assumed that such a disturbance cannot occur with a system.

8.2 Battery

8.2.1 Battery care

- The battery should be fully charged before first use.
- Note that the maximum capacity of the battery is only obtained after approximately 6 charging and discharge cycles.
- As the efficiency of batteries diminishes over the course of time, it should be occasionally discharged completely in order to maintain the full capacity. To do this leave the unit switched on until it switches itself off. Then fully charge the Ex-AM PMR 2000 battery outside the Ex-area.
- Batteries that have not been used for longer than two months must be fully charged before being used again.
- Remove the walkie-talkie and battery from the battery charger when the charging procedure has finished, otherwise it may impair the service life of the battery.

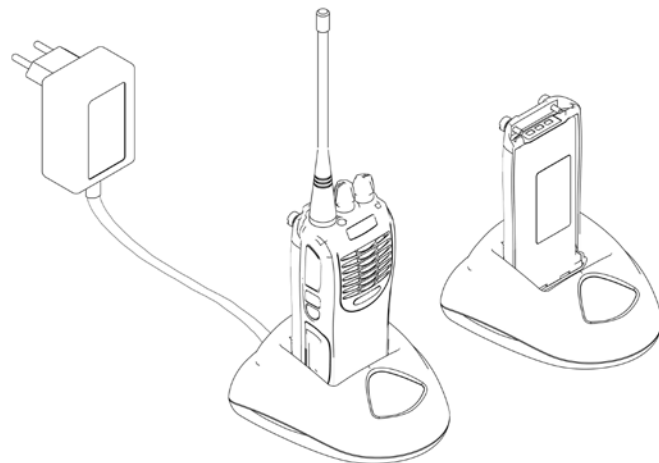
8.2.2 Replacing the battery

- Please dispose of any used / old batteries properly and in an environmentally-friendly manner!

8.2.3 Charging the battery

If the LED display on the unit illuminates red and three warning tones sound every 30 seconds after the battery has been inserted, it means that the battery charge is low. It is recommended to use battery chargers approved and provided by ecom. The LED display on the battery charger indicates the charging status.

LED display on the charger	Status
Red	charging
Green	fully charged



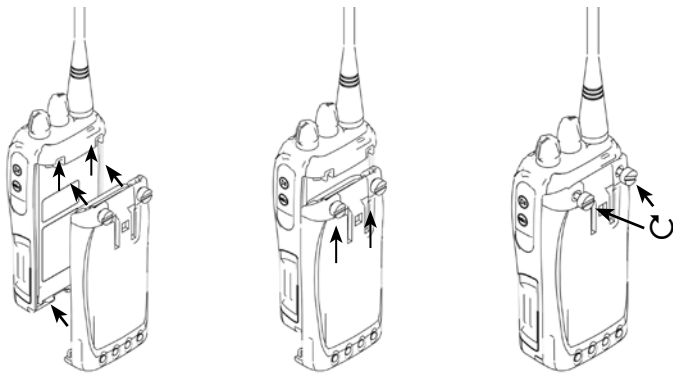
1. Insert the charger adapter into the socket.
2. Insert the charger adapter into the socket of the charger cradle.
3. Insert the battery with or without the radio unit into the charger cradle.
4. The LED display of the charger cradle illuminates red when charging begins and during the charging procedure. Make sure that the battery has been inserted correctly into the charger cradle and that the battery contacts are in connection with the contacts in the charger cradle.
5. The LED display illuminates green when the battery has been completely charged after approximately three (3) hours.
6. You can now remove the radio unit or the battery from the charger cradle.

Comment:

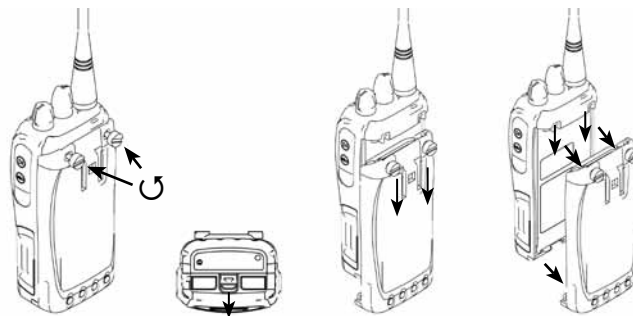
- Make sure that the radio unit is only inserted into the charger cradle when it is switched off.
- The LED display may illuminate if the battery charger is connected to the mains supply before the battery has been inserted.
- When the battery has been removed from the charger, this or any other battery should not be inserted into the battery charger again until the LED display illuminates green.
- The battery charger illuminates red when the battery has been correctly inserted into the charger. If the LED on the battery charger flashes red, it means that the battery may be damaged or the ambient temperature is too high or too low.

8.3 Initial operation**Inserting the battery:**

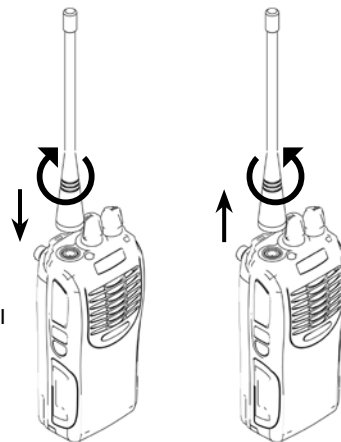
1. Firmly press the battery parallel into the aluminium housing of the radio unit
2. Insert the side guides of the battery into the grooves located in the lower area of the radio unit
3. Slide the battery towards the top of the radio until an engaging sound can be heard
4. Tighten both screws.

**Removing the battery:**

1. Switch off the radio unit.
2. Loosen both screws.
3. Release the battery locking mechanism on the underside of the radio in the direction of the arrow.
4. Slide the battery downwards.

**Attaching the aerial:**

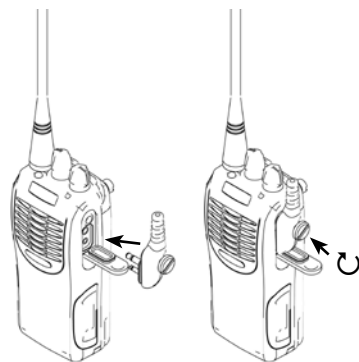
Screw the thread on the lower part of the aerial into the aerial socket that is located at the top of the radio unit. Secure the aerial in place by turning it clockwise.



⌚ Attaching

⌚ Removing

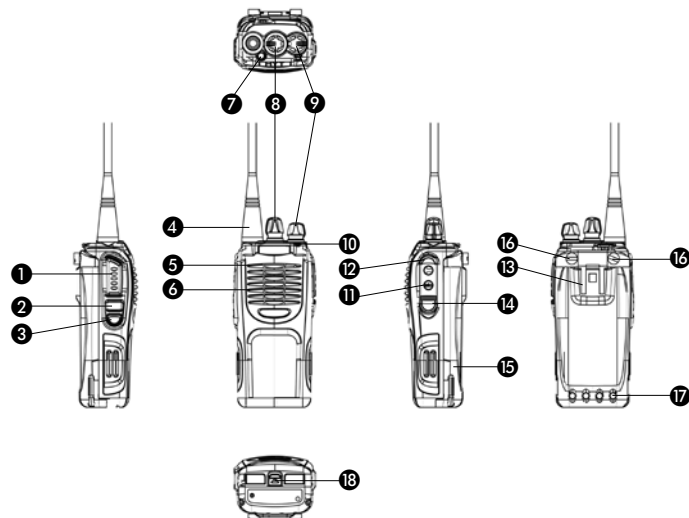
Attaching the external microphone/loudspeaker combination:



1. Open the cover of the side connection socket (please do not remove).
2. Insert the connecting plug of the relevant accessory.
3. Tighten the screw on the connecting plug.

8.4 Operation

8.4.1 Description



1. PTT button
Actuate the PTT button to transmit, release the PTT button to receive.
2. SK 1
Programmable button 1
3. SK 2
Programmable button 2
4. Aerial
5. Microphone
6. Loudspeaker
7. TK (orange button on the top side)
Programmable button 3
8. Channel selector switch
Turn the knob to set the desired channel 1-16
9. ON/OFF switch, volume
Turn the knob clockwise to switch on the radio unit. The knob must be fully turned anti-clockwise to switch off the radio unit. When the radio is operational this knob is used to adjust the volume.
10. LED status display
11. Accessory connection socket
12. Thread for attaching the accessory
13. Belt clip fastening
14. Cover for connection socket
15. Battery
16. Fixing screws for the battery
17. Battery charging contacts
18. Battery lock

8.4.2 Standard functions

Switching on the radio unit

Turn the ON/OFF knob clockwise to switch on the radio. The LED display flashes green once. A signal sounds if this function has been programmed.

Adjusting the volume

If you have set the monitor or noise suppressor on a programmable button, the noise limiter will be opened when this button is pressed. You now hear the background noise and can adjust the volume comfortably. To do this turn the volume knob on the radio.

Channel selection

Turn the channel selection knob to set the desired channel. The radio unit announces the current channel number.

Transmitting

To transmit a message press and hold the PTT button for the duration of your message. Speak normally into the microphone and make sure that the unit is positioned approx. 2.5 cm to 5 cm away from your mouth.

Receiving

After transmitting a message release the PTT button to receive messages via your radio unit.

8.4.3 Other functions

The following functions can be programmed via the optional software.

Call

Press and hold the pre-programmed button „Call 1/Call 2“ to transmit the stored DTMF/5-tone/HDC 2400™ code.

Emergency call

When the pre-programmed emergency call button is actuated, the radio unit transmits an emergency call or an identification number (ENI, background audio frequency to a partner or a system).

Possible button allocations are:

	Activate emergency call	Cancel emergency call
Mode 1	Long press	Short press
Mode 2	Short press	Long press

Time alarm (lone worker mode)

The time alarm enables the user to conduct safety-critical lone work. Actuate the pre-programmed button „Lone Worker“ to activate this mode. If the user does not actuate any buttons within the preset time, the radio will emit a warning tone. This warning tone can be cancelled by pressing any button, otherwise the radio will revert to the emergency call mode after a brief time interval and an emergency call will be transmitted.

Man-down alarm (dead man's switch)

The integrated man-down alarm enables the user to conduct safety-critical lone work. Press the pre-programmed button „Man Down“ to activate this function or programme the radio unit so that this function is activated when the radio is switched on.

The radio unit will emit a warning sound within a predefined period of time if it is located in a horizontal or inward-inclined position. If it maintains such a status within a preset time, it will automatically change to the emergency call mode. The radio unit must be brought back into a vertical position to shut off the alarm.

Monitor/noise limiter OFF (squelch)

Press the pre-programmed button „Monitor“ to switch off the noise limiter and press it again to switch it back on.

Scan

Press the pre-programmed button „Scan“. The scanning process starts from the current channel and the channel number of the scan list increases. The LED display flashes green in the scanning mode or it illuminates continuously when a signal or compatible signals are received on the channel. Press the scan button again to switch off the scan mode.

Whisper mode

Press the whisper mode button („Whisper“) in order to be able to be clearly understood when speaking quietly. Press the button again to switch off this function.

Voice-operated transmission (VOX)

Press the pre-programmed VOX button to activate the VOX function. When the VOX function is activated the user can transmit a message without keeping the PTT button depressed (only possible directly on the unit).

Lease mode

In the lease mode the unit is only set for use during a certain period of time. By pressing the pre-programmed lease button the unit specifies the remaining time acoustically („1“, „2“, „3“, „4“, „5“). The lease time can be defined via the software.

Transmitting time limitation (Time Out Timer)

The transmitting time limiter (TOT) prevents continuous transmission and therefore prevents channels being occupied. The transmitting time limiter (TOT) can be adjusted in increments via the software. The expiration of the specified transmission time is signalled by a reference tone. The user can interrupt the signal by releasing the PTT button. If the transmitting time limiter is exceeded, the transmission is interrupted automatically. The maximum transmission time in the TOT mode is 3 minutes.

Battery status display

Press the pre-programmed battery status display button and the walkie-talkie will announce the battery status acoustically („1“, „2“, „3“, „4“).

Battery saving mode

Turn on the battery saving mode via the optional software in order to reduce the unit's power consumption during standby operation. The radio unit automatically changes to this mode after approximately 10 seconds if there is no activity. The mode is deactivated as soon as the unit receives a signal or the user conducts an activity.

Low battery status warning

The red LED display flashes if the unit's battery status is too low for transmission. After an audio signal is sounded three times (after 30 seconds in each case), transmission is terminated. The battery must be recharged or replaced.

Control call

The control call is transmitted by pressing a pre-programmed button. The recipient receives a warning tone over a preset time period. The control call can be terminated by pressing any button. Otherwise the radio unit will automatically change to the emergency call mode that was programmed to begin with.

CTCSS/DCS pilot signals

The analogue/digital CTCSS/DCS pilot signals serve for the formation of groups and the avoidance of unwanted activities on the same channel. If a pilot signal has been programmed and a message is transmitted, only one channel opens for the recipient if he/she has programmed the same pilot signal.

8.4.4 Troubleshooting

Possible causes	Solutions
No function	The battery status is too low, the battery must be recharged or replaced.
Group members cannot be heard.	Make sure that you have programmed the same frequency, the same pilot signal (CTCSS/DCS) or the same 5-tone / HDC2400™ signal as your group members. The group members may not be within the reception area.
Other voices that do not belong to the group can be heard on the channel.	Make sure that all of the group members have set the same audio frequency.

9. Repair

The national regulations and guidelines for repairs vary from country to country. We therefore recommend that all repairs are conducted by ecom instruments GmbH, Germany because the safety of the unit needs to be tested after repairs are implemented.

10. Cleaning, maintenance and storage

- Only use a damp and suitable cloth or sponge to clean the unit. Do not use any solvents or abrasive cleaning agents when cleaning.
- It is recommended that you have the functionality and accuracy of the unit inspected by the manufacturer every two years.
- The battery should be removed from the unit during prolonged periods of storage.
- Do not allow storage temperatures to exceed or fall below the permitted range of -20°C to +45°C.

11. Disposal

Old electrical devices as well as „historical“ old electrical devices from ecom instruments GmbH are supplied for disposal at our expense and disposed of free of charge in accordance with European Directive 2002/96/EC and the German electrical law of 16/03/2005. The costs associated with returning devices to ecom instruments GmbH are to be borne by the sender.

In accordance with “Directive 2006/66/EC on batteries and accumulators and waste batteries” we are obligated to provide you with the following information:

Your device contains a rechargeable lithium battery.

Depleted batteries or rechargeable batteries that can no longer be recharged should never be disposed of along with normal or household waste. Old batteries can contain harmful substances that are hazardous to health and damaging to the environment. Please return the batteries/rechargeable batteries. Return is free of charge and required by law. Please only dispose of discharged batteries in the designated containers and tape the terminals of lithium batteries.

Note: The battery used in this unit poses a fire hazard and can cause chemical injuries if it is used improperly. Neither the battery nor the battery cells should be opened or disassembled and they should not be burned or exposed to temperatures exceeding 100°C.

If the battery needs to be disposed of, it can be removed as described under point (8.3). The disposal regulations specified above are also applicable for old devices.

All batteries and rechargeable batteries can be recycled. Precious raw materials such as iron, zinc and nickel can therefore be reused.

The symbol  has the following meaning: Batteries and rechargeable batteries should not be disposed of along with normal or household waste.

12. Warranty and liability

In accordance with our general terms and conditions ecom instruments GmbH provides a warranty for this product for a period of two years regarding its function and material under the specified and permitted operating and maintenance conditions. Exempt from this are all parts that are subject to wear and tear (e.g. batteries, aerials, clips, hand straps, etc.) We provide a 6-month manufacturer's warranty especially for the supplied Ex-battery.

This guarantee does not extend to products that are used improperly, have been modified, neglected, damaged in accidents or exposed to abnormal operating conditions and inappropriate handling.

Any claims under the guarantee can be invoked by returning the defective equipment to the manufacturer. We reserve the right to repair, adjust or exchange the device.

The aforementioned guarantee conditions are the sole and only right of the purchaser to compensation, are exclusively valid and replace all other contract or legal warranty obligations. ecom instruments GmbH assumes no liability for special, direct, indirect, accompanying or consequential damage as well as losses including the loss of data, independent of whether it was caused by violation of the warranty obligation, lawful or unlawful action, action in good faith or any other action.

If the limitation of a legal warranty as well as the exclusion or limitation of accompanying or consequential damage is not permissible in certain countries, it may be that the aforementioned limitations and exclusions are not valid for every purchaser. Should any such clause of these warranty conditions be declared ineffective or unenforceable by a competent court, then the effectiveness or enforceability of any of the other conditions of these warranty conditions shall remain unaffected by such a judgement.



WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
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TEL 0044 117 977 4647 FAX 0044 977 5582

13. EC Declaration of Conformity

Communication
Torches/Flashlights
Mobile Computing
Measuring & Calibration



Declaration of EC-Conformity

We

ecom instruments GmbH
Industriestraße 2 • 97959 Assamstadt • Germany

declare under our sole responsibility that the product

Ex-PMR 2000

to which this declaration relates is in accordance with
the provision of the following directives

94/9/EC	equipment and protective systems intended for use in potentially explosive atmospheres
89/336/EEC	electromagnetic compatibility
99/5/EC	radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity

and is in conformity with the following standards or other normative documents

EN 300086-1-2:2001	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Land mobile service; Radio equipment with an internal or external RF connector intended primarily for analogue speech - Part 1: Technical characteristics and methods of measurement; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE directive
EN 301489-1-5:2002	Electromagnetic compatibility and Radio spectrum Matters (ERM) - ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Part 1: Common technical requirements; Part 5: Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech)
EN 50020:2002	Electrical apparatus for potentially explosive atmospheres Intrinsic safety „I“

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Communication
Torches/Flashlights
Mobile Computing
Measuring & Calibration



EN 50360:2001	Product standard to demonstrate the compliance of mobile telephones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz - 3 GHz).
EN 60079-0:2004	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
EN 60950-1:2001	Information technology equipment - Safety - Part 1: General requirements.

ecom instruments GmbH
Assamstadt 11. 05. 2007

Rolf Nied
Managing Director

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03/09 IAE 01 401
VDE 0816-1:2006

Further details regarding the declaration of conformity can be found at the following address: <http://www.ecom-ex.com> in the product download area.

14. EC-Type Examination Certificate

Test and Certification Body

(1) EC Type-examination Certificate

- (2) Devices and safety systems for use as intended in areas at risk of explosions - Directive 94/9/EC
- (3) EC type-examination certificate number

ZELM 06 ATEX 0318

- (4) Device: Explosion-proof handheld two-way radio, Type Ex-PMR 2000
- (5) Manufacturer: ecom instruments GmbH
- (6) Address: 97959 Assamstadt
- (7) The design of this device is specified along with the different permitted types in the attachment to this type-examination certificate.
- (8) The Test and Certification Body ZELM Ex, certifies as appointed body No. 0820 in accordance with Article 9 of the directive by the European Parliament and the Council dated 23 March 1994 (94/9/EC) that the device fulfils the basic safety and health requirements for the conception and construction of devices and safety systems for use as intended in areas at risk of explosion in accordance with Annex II of the directive.

The test results have been recorded in the confidential Test Report No. ZELM Ex 0850612498.

- (9) The fundamental safety and health requirements are fulfilled through compliance with
- EN 60079-0:2004 EN 50020:2002**
- (10) If an "X" follows the certificate number, reference is being made to special conditions for the safe application of the device that have been set out in the attachment to this certificate.
- (11) This EC type examination certificate only refers to the conception, inspection and test of the specified device or safety system in compliance with Directive 94/9/EC. Additional requirements by the directive may apply to the manufacturing procedure and supply of this device or safety system. These are not covered by this certificate.
- (12) The device marking must include the following information:

 II 2G Ex ia IIC T4

Certification Body ZELM Ex

Braunschweig, 17.04.2007

Dipl.-Ing. Harald Zelm

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EC type-examination certificates without signature and without stamp are not valid. This EC type-examination certificate may only be distributed without change. Excerpts or changes must be approved by the Test and Certification Body ZELM Ex.

Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex * Siekgraben 56 * D-38124 Braunschweig, Germany

(13)

Addition to

(14) EC Type-examination Certificate ZELM 06 ATEX 0318

- (15) Description of the device
The explosion-proof handheld two-way radio, Type Ex-PMR 2000, is for communicating in areas at risk of explosions.
As the power supply, the device is equipped with a rechargeable battery module, Type Ex-AM PMR 2000, and may only be charged outside the area at risk of explosion. The approved accessories listed in the operating instructions may only be used with the handheld radio. The permissible ambient temperature range is -20°C to +50°C.

Electrical data

- | | |
|------------------------|---|
| Power supply | from an internal rechargeable battery module.
The internal power circuits are intrinsically safe. |
| Transmission power | up to 2 W |
| Microphone-loudspeaker | Only for connecting to approved accessories in accordance with power circuit the operating instructions |
| Charging contacts | Only for connecting to the corresponding charging devices. |

Information

The operating instructions must be observed; the rechargeable battery module may only be charged with the corresponding charger outside the areas at risk of explosion.

- (16) Test Report No.

ZELM Ex 0850612498

- (17) Special conditions

Not applicable

- (18) Fundamental safety and health requirements

Fulfilled through standards

Certification Body ZELM Ex

Braunschweig, 17.04.2007

Dipl.-Ing. Harald Zelm

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Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex * Siekgraben 56 * D-38124 Braunschweig, Germany

Translation

2nd amendment

(Amendment in accordance with EC Directive 94/9, appendix III number 6)

ZELM eX

to EC type approval test certificate

ZELM 06 ATEX 0318

Device: **Explosion-protected handheld radio Ex-PMR 2000**

Manufacturer: **ecom instruments GmbH**

Address: **D-97959 Assamstadt**

Description of the amendment

The 2nd amendment to the EC type approval test certificate takes account of modifications to the internal configuration and the approved accessories of the Ex-PMR 2000 explosion-protected handheld radio.

The "electrical data", including the permitted ambient temperature range and the designation, as well as the information specified in the EC type approval test certificate remain unaffected and are also applicable for this 2nd amendment.

The Ex-PMR 2000 explosion-protected handheld radio may be manufactured in the future in accordance with this 2nd amendment and designated as follows:

Ignition protection class / designation: **II 2 G Ex ia I CT4**

The electrical data and all other specifications, as well as the details specified in the EC type approval test certificate remain unaffected and shall continue to apply.

Test report No.

ZELM Ex 0200924690

Basic health and safety requirements

Furthermore, the basic health and safety requirements are met by virtue of conformance with:

EN 60079-0:2006

EN 60079-0:2007

ZELM ex

Braunschweig, 05.05.2009

Zertifizierungsstelle (certification body)

ZELM ex

Kommunikation
Mobile Computing
Portable Handlampen
Mess- & Kalibriertechnik

Communication
Torches/Flashlights
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Measuring & Calibration



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